0035

Incoming
C0150025
Task 2576
OK

From: Karl M Boyer <kboyer@fs.fed.us>
To: <joehelfrich@utah.gov>
Date: 7/10/2006 4:28:45 PM
Subject: Bear Canyon Mine Comments

Joe:

The attachment contains our comments. Dale's comments are first and address primarily the text. Mine are next and address primarily the plates.
We will need to officially send these with a letter later on.

Karl

(See attached file: Bear Canyon Mine Comments.pdf)

CC: Dale Harber <dharber@fs.fed.us>, Betsy Hamann <bhamann@fs.fed.us>, Kevin Albrecht <kalbrecht@fs.fed.us>, Mesia Nyman <mnyman@fs.fed.us>, <waynehedberg@utah.gov>

Forest Service Comments
Bear Canyon Mine Permit Revision
July 2006

General comments:

1. The maps are at varying scales, some are on a base of UTM coordinates, and some are on a base of township, range, and section. All maps should show section lines and be at the same scale so that they may be overlain to evaluate impacts to other resources.

2. The impacts of subsidence on other resources are a primary concern of the Forest Service. These impacts can not be evaluated in the NEPA document until Co-op provides a map showing the proposed mining plan and predicted subsidence. This may prevent the Forest Service from being able to consent to the mine plan modification in time to meet Co-op's desired schedule.

3. The Forest Service is proceeding under the assumption that a mining plan for only the Tank seam will be provided. Consent to the mine plan modification would limit mining to the Tank seam only, and an additional NEPA analysis and consent would be required for mining other seams.

Specific comments:

Page 3-3, Vegetation

The "Scope" section has been deleted. The section should remain, including the requirement to maintain vegetation reference areas.

Page 3-28, Lease 61048 & 61049 Addition

The only wildlife data added for these lease additions is on deer and elk habitat. The sections on aquatic wildlife habitat, terrestrial wildlife habitat, mammals, birds, amphibian, and reptiles in the approved MRP (pages 3-23 to 3-28) must also be supplemented.

Page 3-28, Listed or Proposed Endangered or Protected Species of Plants and Animals

The new text does not fit with Fig. 3-1 of the approved MRP. There is not a clear distinction between T&E species and sensitive species. There should be an explanation of why App. 3M covers bats and flammulated owls when they are not even mentioned in the text on page 3-28.

Page 3-32, Habitats and Areas of High Value

Deer and elk fawning/calving areas and winter range areas are also high value habitat, in addition to the riparian areas.

Page 3-38, Protection of Vegetative Resources

Stating that impacted areas will be revegetated with a native seed mix is not adequate. For National Forest System lands, a FS approved seed mix must be

used. The reclamation standard is 90% of the vegetation of the surrounding area, not more than 10% weeds, and no noxious weeds.

Page 3-43, Amphibians

List the three amphibian species in the permit area and their required habitat. Provide some rationale for why the species and their habitat are not likely to be affected.

Page 3-43, Reptiles

List the reptiles and their required habitat. Provide some rationale for why the species and their habitat are not likely to be impacted.

Page 3-68, last paragraph

Provide some background on the purpose and need for the raptor prey base study, and briefly explain the results, especially those related to coal mining.

Page 3-70, first complete paragraph

Is surveying every 5 years adequate? Is Co-op still participating with the other coal companies in the annual raptor monitoring?

Page 3-70, last paragraph

Delete "...by dynamiting the sides and making the crack passable." with "...in a method acceptable to the Surface Management Agency or the surface owner."

Page 5-16, Subsidence Control Plan

A map showing the panel locations in the Tank seam, areas of predicted subsidence, and amount of predicted subsidence, must be provided. It is not possible to evaluate the impacts to non-coal resources without these data.

Page 7-44, Probable Hydrologic Consequence Determination, third paragraph

A 100 (foot?) barrier along streams may not be adequate. It should be designed based on overburden and angle-of-draw. Explain if tension fracturing is expected at the surface, and what impacts there may be on the hydrology. This is another item that requires proposed mine plan and predicted subsidence data.

1) General Comment:

Lines crossing each other and representing different information must be in different colors or different line weights. Example: Plate 6-7, the isopachs cross over the line merging with another coal seam. This type of thing needs to be corrected on all maps where it occurs.

2) General Comment:

Map symbols should be consistent on all maps. Examples: Plate 6-8, Structure

Contour Map, Bear Canyon Seam has three different colors for its structural contours. Plate 6-7, Isopach Map, Bear Canyon Seam uses two different colors for its contours.

3) General Comment:
All maps should be on the same scale.

4) General Comment:
It would be very helpful if all maps had a green line (or some other appropriate color) showing the Forest boundary.

5) General Comment:
Use the Township, Range, Section system (Rectangular Survey System) on all maps. Currently some are on township and range while others are on UTM coordinates.

6) General Comment:
All agencies should be supplied with the same, most recently updated documents so we are all reviewing the same material.

7) General Comment:
A mine plan is presented for the Tank Seam only (Plate 5-1C); therefore, an environmental analysis will only address that area. Environmental analyses will be performed for other areas as new mine plans are submitted.

8) General Comment:
a) On all plates that depict a merge line (between two or more coal seams) that cuts off the contours (for isopachs, structure, interburden, overburden), continue the contours into the merged seam while retaining the merge line (using a differently colored line). Plate 6-12 of the Original Submittal does this. Presently, on all except Plate 6-12, the contours stop at the merge line (see Plates 6-3, 6-6, 6-7, 6-8, 6-9).

b) For contours that merge from one seam to another, consider a means by which the seams can be differentiated, i.e., different colors or different line weights.

9) General Comment:
Comments 1 through 8 also apply to Plates 6-10, 6-11, 6-12, 6-13 and any others with these deficiencies that were reviewed during the first submittal.

10) Plate 1-1, Permit Area:
The plate should show the Forest Service boundary and the new permit areas, in addition to the other information; this would make the project easier to understand.

11) Plate 1-2, Surface Ownership:
T.16 S., R. 8 E., S ½ SE ¼ , Section 21 should show the Forest Service as the surface owner. The Public Room of the BLM State Office confirmed that the Forest Service is the surface owner for this area (phone conversation between Forest

Service personnel and Public Room employee, July 5, 2006).

12) Plate 5-1A, Blind Canyon Seam:
   a) The potential subsidence zone shown on the map is identical to the mine workings for the Tank Seam shown in Plate 5-1C. Please clarify.
   b) Identify the thin black line running through the subsidence zone.
   c) Explain what is meant by "LOW COAL AREA" in the subsidence zone.
   d) If the projected subsidence zone is for the Tank Seam, then so state.
   e) The subsidence zone boundary could not follow the outline of the mine workings so closely. Several factors affect the subsidence limits.

13) Plate 5-1B, Bear Canyon –No.1 Mine:
   a) This map needs to be on a more meaningful scale and on the Rectangular Survey System (as stated previously).
   b) If future mine workings are planned for this area, then show them on the map.
   c) Make it clear which seam the map shows.

14) Plate 5-1C, Tank Seam:
   The subsidence zone boundary could not follow the outline of the mine workings so closely. The subsidence effects will be dependent upon variables such as depth of overburden and topographic features.

15) Plate 5-3, Subsidence Map:
   a. The title should indicate the seam that the subsidence is for.
   b. The map should show the outside limits of the subsidence zone with a heavy colored line. Within the subsidence zone, one or two foot contours should be used to show the predicted subsidence throughout the entire area.
   c. Is the subsidence shown in Plate 5-3 for previous workings or future workings? The subsidence zone doesn't correlate to the future mine workings shown on Plates 5-1A and 5-1C. Show the current and projected Tank Seam mine workings with the projected subsidence zone above them.

16) Plate 6-6, Overburden Map, Bear Canyon Seam:
   a) The contour interval is 200 feet, but a 100 foot interval is shown between 1600 and 1700.
   b) Remove the large note that states "See Plate 6-6".

17) Plate 6-9, Interburden Isopach Map:
   a) The interburden contours are not labeled with the distances between coal seams.
   b) The contours don't make sense, i.e., two of the contours connect with the "merge line". This means that more than one thickness merges to zero; it doesn't make sense.
   c) If the two seams merge, then the point of mergence should be represented by the zero interburden contour.

18) Plate 7-4, Water Monitoring:
   a) Show the mine workings for each seam in a different color.
   b) The lines representing the Tank Seam mine workings cross and interconnect with those of lower seams. The lines need to be redrawn correctly and colored differently.